

# **Material Safety Data Sheet**

12601 Twinbrook Parkway, Rockville, MD 20852 USA Phone Calls: 301-881-0666 8 a.m. to 5 p.m. EST Mon. - Fri.

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#### CARBOXYMETHYLCELLULOSE SODIUM

Catalog Number: 1096553 Revision Date: May 27, 2004

### **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Common Name: Carboxymethylcellulose Sodium

Manufacturer: U.S. Pharmacopeia

Responsible Party: Reference Standards Technical Services

Mailing Address: 12601 Twinbrook Parkway, Rockville, MD 20852 USA

Phone: 301-816-8129

Hours: 8 a.m. to 5 p.m. EST Mon. - Fri.

**Product Use:** USP Reference Standards and Authentic Substances are used for chemical tests and assays in analytical,

clinical, pharmaceutical, and research laboratories.

#### **SECTION 2 - HAZARD INFORMATION**

Adverse Effects: If ingested, may cause nausea and vomiting. Possible allergic reaction to material if inhaled, ingested or in contact

with skin.

Overdose Effects: n/f

**Acute:** Possible eye, skin, gastrointestinal and/or respiratory tract irritation.

**Chronic:** Possible hypersensitization.

**Medical Conditions Aggravated by Exposure:** Hypersensitivity to material.

Cross Sensitivity: n/f
Target Organs: n/f

For additional information on toxicity, see Section 11.

#### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Carboxymethylcellulose Sodium

Formula: (C2H4O3)x . (Na)x

Synonym: n/f

Chemical Name: Cellulose, carboxymethyl ether, sodium

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CAS: 9004-32-4

RTECS Number: FJ5950000

Chemical Family: n/f

Therapeutic Category: Pharmaceutic aid (suspending agent, tablet excipient, viscosity-increasing agent)

Composition: Pure Material

# **SECTION 4 - FIRST AID MEASURES**

**Inhalation:** May cause irritation. Remove to fresh air.

Eye: May cause irritation. Flush with copious quantities of water.

Skin: May cause irritation. Flush with copious quantities of water.

**Ingestion:** May cause irritation. Flush out mouth with water.

General First Aid Procedures: Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity

(anaphylactic) reactions must receive immediate medical attention. If person is not breathing give

artificial respiration. If breathing is difficult give oxygen. Obtain medical attention.

#### **Note to Physicians**

Overdose Treatment: n/f

#### **SECTION 5 - FIREFIGHTING MEASURES**

Extinguisher Media: Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.

Fire and Explosion Hazards: This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical

equipment in contact with dry material to dissipate the potential buildup of static electricity.

**Firefighting Procedures:** As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing

equipment and protective clothing.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Spill Response:** Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or

collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately-labelled

container for disposal. Wash spill site.

#### **SECTION 7 - HANDLING AND STORAGE**

Handling: As a general rule, when handling USP Reference Standards avoid all contact and inhalation of dust, mists, and/or vapors

associated with the material. Wash thoroughly after handling.

Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to

ensure product integrity.

#### SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Engineering controls such as exhaust ventilation are recommended.

Respiratory Protection: Use a NIOSH approved respirator, if it is determined to be necessary by an industrial hygiene survey involving

air monitoring. In the event that a respirator is not required, an approved dust mask should be used.

**Gloves:** Chemically compatible

**Eye Protection:** Safety glasses or goggles **Protective Clothing:** Protect exposed skin.

Exposure Limits: n/f

#### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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Properties as indicated on the MSDS are general and not necessarily specific to the USP Reference Standard Lot provided.

**Appearance and Odor:** White to off-white granular powder; odorless.

**Odor Threshold:** n/f

**pH:** 6.5 - 8.5 (1% aqueous solution)

Melting Range: n/f
Boiling Point: n/f
Flash Point: n/f

**Autoignition Temperature:** >698° F

Evaporation Rate: n/f

**Upper Flammability Limit:** n/f **Lower Flammability Limit:** n/f

Vapor Pressure: n/f
Vapor Density: n/f
Specific Gravity: 1.59

Solubility in Water: Soluble

Fat Solubility: n/f

Other Solubility: Insoluble in alcohol, ether, and most other organic solvents

Partition Coefficient: n-octanol/water: n/f

Percent Volatile: n/f
Reactivity in Water: n/f
Explosive Properties: n/f
Oxidizing Properties: n/f
Formula: (C2H4O3)x . (Na)x

Molecular Weight: n/f

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#### SECTION 10 - STABILITY AND REACTIVITY

Conditions to Avoid: n/f Incompatibilities: Oxidizers

**Decomposition Products:** When heated to decomposition material emits toxic fumes of Na2O. Emits toxic fumes under fire conditions.

Stable? Yes **Hazardous Polymerization?** No

### **SECTION 11 - TOXICOLOGICAL PROPERTIES**

**Oral Rat:** LD50: 27,000 mg/kg Oral Mouse: LD50: >27 grams/kg

Other Toxicity Data: Inhalation Rat LC50: >5800 mg/m3/4 hr.

Skin Rabbit LD50: > 2 grams/kg

**Irritancy Data:** n/f Corrosivity: n/f

Sensitization Data: n/f

Listed as a Carcinogen by: NTP: No IARC: No **OSHA:** No

Other Carcinogenicity Data: No

**Mutagenicity Data:** Not mutagenic in Ames assay or chromosome aberration test.

Reproductive and Developmental Effects: Animal studies have not shown carboxymethylcellulose to cause adverse reproductive

effects.

#### **SECTION 12 - ECOLOGICAL INFORMATION**

**Ecological Information:** n/f

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

**Disposal:** Dispose of waste in accordance with all applicable Federal, State and local laws.

#### **SECTION 14 -TRANSPORT INFORMATION**

**Shipping Name:** n/f

Class: n/f

UN Number: n/f Packing Group: n/f

Additional Transport Information: n/f

# SECTION 15 - REGULATORY INFORMATION

**U.S. Regulatory Information:** n/f

**International Regulatory Information:** n/f

### **SECTION 16 - OTHER INFORMATION**

**Revision:** 27-May-04

**Previous Revision Date: None**